Be Flexible, Be Ready.... For We Live In Different Times

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When I was growing up in the late 1950s, if another kid didn't like you he usually came right up in front of your face to start an altercation. Back then, it was the same way with nations. If such a term as "civilized warfare" was possible, this was how it worked. We also, as kids and countries, fought using rules. As strange as it seems today, in the past there were rules to follow in killing your enemies. Today, however, some nations and groups are no longer following rules during a conflict. Even rules, which were agreed to in places like Geneva, are now ignored. In other words, the senselessness has become more senseless. While we in the United States still hold these rules and try to abide by them, others do not. They use ways and means unheard of in the past in order to seek their gains or exact revenge. Regardless of the "cause," for the first time since Pearl Harbor over 60 years ago there has been an attack on our soil by outside forces. By this, I am talking about the brutal and unprovoked attacks on September 11, 2001. Like it or not, the rules have dissolved. Many of us, for the first time in our lives, lost our innocence. We now feel vulnerable to the senselessness that in the past we've only witnessed on television and as only occurring in other parts of the world. We now see how simple means can create disasters on our own doorstep. What other terrible things are planned or could possibly happen in our country and to ourselves? Panicking is not the answer. Planning and preparing, is.

I've stopped trying to figure out just why some people don't like others and have started accepting the fact that it does happen and will happen again. That is the root to moving forward, accepting. We, in today's shrinking world, must accept the fact that no matter how many people outside our borders we might help, how many other nations we might work with, there will be others who don't like who we are or what we believe in and will attempt to destroy our beliefs and goals. Unfortunately, it has become much easier to reach out in today's world than ever before. Faster planes, the Internet and other technologies have made it easier to do both good and evil. We, as emergency communicators, must make these new technologies and new information work on our behalf so if there ever is another "9/11" we will be able to react more quickly than before. The keys to this are flexibility and preparation. We need to prepare and become better at what we do. The cobwebs of our old communications techniques need to be brushed aside and replaced with those based on the new technologies and the new threats that surround us. Back when most emergency communications philosophies were developed, we feared natural disasters and communism. Today, we still need to prepare for natural disasters, but also for the new threat of terrorism. Neither hurricanes nor terrorists "play" by the rules, so the philosophies dealing with both must be different from those followed and drilled into our heads yesterday.

Due to a better life which most of us now lead, as compared to the 1950s, there has been a drastic change in demographics. Many people have moved to areas of the country that are fragile in nature when faced with severe weather, such as coastal areas during hurricanes, and have built homes and support buildings in areas that in retrospect we shouldn't have. We should have never built homes based on a "view." I am sorry to say that emergency communications hasn't changed to keep up with the actual support needs and as a result, we have learned hard lessons from events like Katrina in our attempts to give communications support during these devastating natural events. Although emergency communicators cannot change either the threat of severe weather or the increased population growth into these fragile areas, we can use what we've learned from events such as Katrina to better prepare in supplying emergency communications support. The same is true concerning terrorism. We had a rude awakening with the events of September 11th. We cannot afford to ignore the lessons learned from either.

Our first step is to produce a "united front" in supplying emergency communications. By whatever mix of alphabet letters your group uses to define itself, we all need to work together towards a common goal without bickering, cliques and competition. Let's face it, if several fire departments came to put out the flames engulfing your home, would you care which one did the job? Although we are each supported as different groups under different umbrellas, we need to learn and train in new techniques that are shared by everyone. The patch on my shirt may be different from yours, but our training and execution should be very much alike. With this in mind, there needs to be developed a new universal emergency communications program which all of us, regardless of what group we belong to, can refer to when training. Put your hands down. The ARRL EmComm program is riddled with errors and old-fashioned ideas. It was developed by people who have never gotten their hands dirty in emergency communications. It needs to be scrapped. What is needed is a training program written on fresh, blank sheets of paper and based on experience, not titles. I now issue a challenge to every communications group: Get your experienced communicators together and start working directly with other groups as one team to develop such a strategy and program. This is the only way a true training program will be developed. Cut away the useless drivel, such as paragraph upon paragraph on "who do we serve", and get to the true training. By the way, we don't "serve" anyone. A waiter does that. We work as part of a greater TEAM when called upon. It is about time groups grew up and got rid of that mindset. It only holds back on how we are perceived and respected. It is now time to rely on input from people who have gotten dirty, setup stations in "harm's way" and braved the elements to supply communications whether it is in the face of a hurricane, terrorism or freezing while they've searched for that missing child. We need information based on real-life, not old ideas or scenarios plunked out of the sky.

After a comprehensive communications program has been developed, it needs to be implemented by everyone. It needs training out in the field and not feeble tabletop drills. Work out the kinks with your groups until everyone, in every group, is on the same page. This needs to be done so if a group is overwhelmed during an event it can tap additional communications personnel from another group without losing anything in translation when these transfers are deployed. (With this in mind, there should be a section included in this universal training that covers working on loan to other emergency communications groups.) This training should be supplemented with drills that cover events that might actually take place. These drills must also be combined in nature with all emergency communications groups taking part. We need to train together for one simple reason: We sink or swim together. If we can work together, we will become more professional in the eyes of both the government and organizations we supply communications for.

Now, as to prepare for emergencies that might need our communications support: For too long I have seen local governments preparing for the wrong emergencies. Since emergency communications groups have felt the need to follow suit, we too have been training for the wrong events. This all boils down to one fact: The governmental and service agencies we have planned on supporting have no idea what to prepare for! They do more harm than good when they focus on just on antiterrorism instead preparing for natural disasters or events caused by just plain stupidity. Let's compare this philosophy to operating a hardware store. Why would you wish to sell snow shovels, just because your friend who has a store in Maine sells them, when your store is located in an area that has never seen a snowfall? It is the same way in preparing for emergencies. What needs to be done is to first identify both the strengths and weaknesses based upon areas. If we were to talk about acts of terrorism, what really would create a sense of vulnerability if there were a terrorist strike in your area? What would create the most "bang for the buck" not only in actual damage, but also to things that represent our way of life? In my area of the Texas, there are several things that would have damaging consequences in both the financial and moral arenas of our lives. One of the most venerated places in San Antonio is the Alamo. What a blow to what we hold sacred if it were to be blasted by a car bomb. The destruction would be localized, but the emotional shockwaves would be widespread. So, the fear generated by this event would force those of insecure character running to do things totally non-related to the local event thereby draining manpower and support. This is what terrorists want. Fear. Disruption. Making us change our way of life. Now, let us take that same amount of explosive in the same car and run it through the gates of a refinery in Corpus Christi. There might be a large-scale explosion that would not be as local as the strike at the Alamo. Surrounding areas might need to be evacuated and shelters opened. Then the request, and rightly so, for emergency communicators might occur. Along with this refinery disaster would be far reaching consequences, as the destruction of that refinery would create a gas shortage. This shortage would be reflected in higher fuel prices, higher consumer goods prices and economical shockwaves touching all of us. So, with the limited resources that terrorists have, which would be the better target? Yes, the refinery. Let's back up a minute and talk about the limited resources that terrorists have. They may have a few dollars, being backed by higher-powered groups; however, they lack the ability to obtain most of the things that we fear. Let's shift gears for a moment.

There is some confusion when talking about or preparing for what many call "Weapons Of Mass Destruction". Usually when most of the public hear that term, they think of terrible explosions with mushroom clouds and thousands of people dying with hideous radiation burns all the while laying waste to immense areas of the country. Well, in some respects, it is partially correct in definition. However, it is unfortunate that government "experts" have also lumped into that term so many other things that have no business being defined as WMD. At the same time, we have also sewn together the possibility of any such event taking place.

The new buzzword in homeland defense is the term "Dirty Bomb". This term was originally used years ago to describe a tactical nuclear weapon, designed in the 1970s like a "Neutron Bomb", which would yield a low-level nuclear explosion but emit a tremendous amount of deadly, short-life radiation to kill troops and other people while leaving most of the buildings and infrastructure intact for later use. However, this term is now being used to describe a completely different type of device when used in conjunction with terrorism. The error is that this term is now thrown around all too freely while still being listed in training materials and in the minds of many as a WMD. It is not. It is not even a nuclear device. It is a terrorist device. Its disruption is limited in area and not massive. Let us look at the facts. What is a Dirty Bomb by today's definition? Taking a quote defining the term from the US Nuclear Regulatory Commission (NRC):

"Basically, the principle type of a dirty bomb, or Radiological Dispersal Device (RDD), combines a conventional explosive, such as dynamite, with radioactive material."

This in no way reflects what an atomic bomb is, as there is no splitting of atoms and no tremendous release of energy beyond the conventional blast created by the dynamite. What it proposes to do, however, is to use the conventional explosive to spread whatever radioactive material is placed with it thereby poisoning the air and surfaces within a very limited area. Now, let us define what, how and how much radioactive material is needed to create said Dirty Bomb. Radioactive materials are widely used at hospitals, research labs, and construction sites all throughout this country. Radioactive materials are used for such purposes as in treating illnesses, sterilizing equipment, and inspecting welding seams in new construction. The vast majority of materials located at these sources are not useful for constructing an RDD. Even if such material were obtained, such as stolen byproducts of a nuclear power plant, it would not cause the harm to the general public as perceived by many, as there is very little chance that enough quantity and quality of material could be collected to make even one viable bomb in the true sense of the word. The federal government also has radiation detection equipment that would detect any large amount AND they are able to trace any material back to its source.

A more realistic threat is the fear and panic induced from the announcement of ANY radioactive material being released. Even if it be less than that used in a single cancer treatment. Any detection equipment brought on-site might measure the release of this minimal amount. It would then be reported and amplified by the press so as to terrify the public and have people cowering in their basements. The FACT is that if a Dirty Bomb were ever detonated, the explosion from the dynamite would cause more physical damage and cause more harm to people in close proximity than any radioactive danger they might be exposed to. There would be no need to evacuate neighborhoods nor open dozens of shelters. This makes the Dirty Bomb not a weapon of mass destruction, but a weapon of mass terror based on fear and misreporting by the media. Training for such an event, if defined as a WMD, is wrong and a waste of valuable training time. It also instills a sense of uneasiness. Again, even the NRC admits that if such a bomb were exploded, the resulting damage from the blast is much greater than the possibility of radioactive contamination. In any emergency communications training, it should be briefly covered and not dwelled upon. There is no need for a yearly drill to cover this event. So, as you can see, as a weapon of mass (death and) destruction a Dirty Bomb falls far short. A better use for the dynamite to a terrorist would be to blow up several city bridges or tunnels in the middle of rush hour or pack a large amount into a van in the hopes of destroying a building. Can you imagine the terror of cutting off all the routes from a busy city in effect trapping thousands of commuters? This we have seen before, and will see again, as it is a cost effective method to cause terror and damage. It is doubtful if we will see any string of Dirty Bombs around this country because even the terrorists know they are limited in what damage they actually do and will cause fear only to the uneducated and ill-informed.

So let us stop with the tiring "dirty bomb" training and work on matters that have a greater chance of happening such as limited event terrorism and natural disasters.

The events we should be concerned with are those defined as possibly happening in our specific part of the country. In the coastal areas of the East, we need to train and prepare better as combined communications groups for the greatest threat, not from terrorists but from hurricanes and their associated destruction and flooding. This possible impact area also includes the gulf coast regions. However, not all can be covered by just one blanket plan or training program. Planning needs to be done on area-specific weaknesses and consequences. This planning should not be done by some elected official such as a mayor or governor, but by people who are experienced in emergencies. Would you trust your life during an operation to a hospital administrator who has never held a scalpel, but has a "title", or to a doctor who has the experience? This same philosophy is just as critical when applied to public safety. Go to government officials for public leadership, but go to experienced emergency workers for developing area specific plans and carrying them out. Do you think Mayor Giuliani provided all the brainpower to cope with the World Trade Center disaster? He was wise enough to listen, learn and make educated decisions based upon input and recommendations from the police, fire, rescue and other departments whose talents and experience were invaluable.

In January 2007, Max Mayfield, the outgoing Hurricane Center chief, issued a warning that the Southeast is inviting disaster. He left his high-profile job with the National Weather Service more convinced than ever that people are risking unprecedented tragedy by continuing to build vulnerable homes in the tropical storm zone and failing to plan escape routes or make other preparations.

According to Mayfield:

"We're eventually going to get a strong enough storm in a densely populated area to have a major disaster," he said. "I know people don't want to hear this, and I'm generally a very positive person, but we're setting ourselves up for this major disaster." He continued: "You don't want the federal government to be your first-responders," he said. "The government can't do everything for people and it shouldn't, or else you create a culture of dependence."

Mr. Mayfield predicted that the possibility exists of ten times the death toll than was recorded by Katrina. This region has "the most active and severe weather in the world," according to the weather service's parent agency, the National Oceanic and Atmospheric Administration. There are over 77 million people in this area. We, as emergency communicators, need to heed the warnings of Mr. Mayfield and better prepare on our end for the disaster yet to come. WE are part of the first responders and as such, we must pick up the ball and continue our preparedness. We can't stop a disaster, but we can lessen its effects by quickly re-establishing communications in a stricken area so aid can properly be administered. This will involve the creation of efficient "Jump Teams" which must have the ability to deploy in an area where there is no power, no water, no shelter and not even a tree in which to support an antenna.

In the aftermath of the 2001 terrorist attacks and the major hurricanes that devastated the Gulf Coast region, there has been a renewed interest in preparing and training for disasters. This includes taking advantage of amateur radio resources to fill the void when other means of communications fail. As hams, we know that when disaster strikes it becomes a lesson in futility when local governments grab a few cell phones in the hope that communications can be covered using this technology. Time and time again, we have seen other "systems" fail thus proving that amateur radio operators are the first and best line of communications support. Slowly, we are being accepted by others as a legitimate communications support resource. With this in mind, we are now training with renewed energy and freely sharing our thoughts, ideas and experiences with our fellow hams in the hope of being better prepared each time we are called into action. Yes, we have made mistakes in the past. But let's also acknowledge that unlike other support services we have learned from them and therefore have become better communicators. Just a few years ago, you could search the Internet in an attempt to find websites dealing with ham radio emergency communications only to find very little on the subject. Today, however, there are dozens and dozens of sites you can access in order to obtain new information to build antennas, assemble "go bags" and listings of many other ideas to make your emergency communications support work more efficient and effective. Consequently, with this enlightened spirit, many EmComm groups are devoting additional time in training for large scale disasters. Every communications group should take a page from this and train, drill and support the needs in the event of a large-scale disaster.

Along with this renewed vigor, comes another avenue of support and another challenge which some of us must prepare for. Today, we are being asked by several agencies to take on the additional task of assembling "jump teams" that will have the ability to travel to a disaster area and supply emergency communications from the "lion's mouth." The jump team concept, and jump teams themselves are almost as old as ham radio itself, however, in light of the recent disasters it needs a new spotlight. Jump teams are involved in special situations that will require addressing special concerns relative to today's needs. First and foremost, every jump team that is created must strive to be a self-sustaining operation. There can be no doubt about this. Jump teams cannot place an additional burden on a devastated area by requesting supplies or shelters. They must complete their communications responsibilities acting as a "stand alone" unit, bringing with them all the equipment, supplies, food, water, shelters and all the support they might require to the area-specific stricken location. Depending upon the disaster, its location and time of year, jump teams will be required to bring not only basic ham radio and personal gear but also different equipment, supplies and clothing that will be specifically suited to support each particular event.

The most important piece of any communications support program are its operators. However, before ANY ham radio operator even contemplates raising their hand at an EmComm meeting to volunteer for inclusion into a jump team they must be fully aware of what will be expected of them. Being part of any deployment team of this nature requires that you might be asked to deploy in situations that are both physically and emotionally demanding. This is not like deploying for some limited disaster or at the tail end of an event such as many of you who have handled communications in some shelter for a few days following a hurricane or winter storm might have done. This is much different. Jump teams quite often are the very first communications out of a decimated area. It is imperative that they get on the air as quickly as possible and stay on the air by whatever means at their disposal. They must be able to erect antennas in areas where nothing might be left standing or where the average ham thinks it cannot be done. It requires special knowledge, skills and training. The hams who form as a jump team must know how to improvise and adapt using what they have brought and what limited things they can scrounge. There needs to be a little "MacGyver" in every team member.

I believe that when someone or some group forms or are part of an emergency communications "Jump Team," they need to approach it as if it were a DXpedition to some uninhabited island where the only thing they can count on is bird shit, bad weather and each other. Like a DXpedition, there will be a team leader who will delegate responsibilities that each member must fulfill so the station(s) can be up and running in as little time as possible. This pre-delegation will be based on skill-level and experience in each area. I don't think I have read of anyone taking the same attitude of a DXpedition and applying it to an EmComm Jump Team, but it certainly fits.

With all of this, being a team member also means being in very good physical condition. At times, it can be much more demanding than "rustic camping." Many years ago, I deployed to the Virgin Islands following a hurricane. Arriving there, I found it to be oppressively hot and humid in the hurricane's aftermath. Weather-wise, it was not what you would experience during any vacation period. The sweat boiled off me like a man about to face a firing squad, and this just from the little effort I expended in erecting a dipole antenna. There was no place to cool off, either. It was so bad that I couldn't sleep during my scheduled off time and I lost weight from deploying in this harsh environment. Living in a tent, and not in the air-conditioned luxury of some hotel as would be the case during a vacation, placed an additional burden that sometimes revealed itself by increased stress levels among people we had to work with.

There may be times when it will be a trek to pick your way through rubble and debris just to go to a makeshift bathroom. No showers. No fancy food. Just eating what you've brought, especially for the first 72 hours. You have to honestly answer this question: "Can I do this?" "Can I operate and act as a professional communicator under more deplorable conditions than we might associate with living in the back areas of any "third world country" or the dirtiest conditions you might ever imagine... or be deployed in a location where you've felt that you were losing the feeling in your fingers from the extreme cold?" As a "go anywhere" jump team member you must be able to withstand both extremes of climate. If you think I am exaggerating, then talk to a few "first responders" of past major disasters. It would be a good idea to first get a physical and ask your doctor if you would be up to the task of deploying in hardship areas. Remember, you're not a kid of 18, anymore. (At least this way you'd be getting the physical that you keep putting off.)

OK, let's say that you have answered "yes." Now another potential roadblock gets thrown into the mix. That is the emotional stress of any disaster. First is the stress of assembling a station where none ever existed. This will not be a casual "Field Day" setup. People are depending upon your team to get communications up and running in as little time as possible. When your team gets to it's location, usually each team member has already been pre-assigned a specific logistical task(s) to perform such as setting up shelters, erecting antennas, doing station setup (rigs and power, etc), contacting and interacting (with informational gathering) with local agencies and supplying nutritional support for the team are examples of but five of the basic required needs.

After your team's initial station is running, your thoughts might then shift to an even greater stress agent. You have to ask yourself this: Can you subjectively deploy into a disaster area and do your communications job without letting your emotional floodgates open? This does not mean that you should be a cold-hearted person. If you were, you would not even be considering volunteering! What this means is that you should be able to see beyond the sorrow towards the greater goal of helping the devastated area get back on its feet. You'll need a means and a way not to focus on the actual disaster but rather to focus on your communications job. It requires courage. The emotional burden doesn't stop there, either.

Even if you are the most seasoned EmComm operator, you must remember that you are a guest of whatever communications group is in-charge of the disaster. You are there by their request/invitation. You must be able to take their orders and follow their rules no matter if it goes against everything you have been taught and drilled on. It is their show, not yours. They may make mistakes. Swallow hard and do your job. If you cannot do this, then don't deploy. If they ask your advice or opinion, give it in a non-threatening manner. Again, it is their community and therefore their responsibility.

If your EmComm group is worth its salt, then they will help you in your jump team training regarding "emotional conditioning" before you are faced with deployment. They will show you techniques on how you can emotionally disengage from the event during your break times so you can sleep or physically recharge. You will learn how to "decompress" after your deployment so what you have seen and experienced doesn't affect how you will react when you get back home. These factors are just as important as bringing the proper gear.

Can you handle all of this? Can you physically and emotionally handle the task? Can you also afford to invest the additional time for special training and deploying? It won't be easy, nor will it be a "one day deal". You won't be able to "pick and choose" which event you wish to be involved in. If you can do all of this, then the next step is to talk to your local EmComm group about being part of a jump team. There are a lot of things you'll have to learn and many things you'll need to acquire to be a part of such a team. It is not a job for "badge polishers", to inflate egos or for the faint of heart. It is a down-and-dirty job for special people with special skills for a special responsibility.

After doing some nosing around on the Internet, and talking to EmComm people, it appears that some people and groups are confusing the terms "Go Kits" with "Jump Kits." To me, a "Go Kit" is something not unlike a "Go Bag" which contains most of the personal supplies and radio equipment that an individual might need to deploy, i.e.: "go to" to a local event such as to a shelter to assist in communications until a weather event has passed in a day or two. These items are usually stored in a backpack or plastic bin. You actually aren't "jumping" lock, stock and barrel anywhere, as much as you are being deployed to some location.

(A lot of hams who showed up at Red Cross in the hopes of helping out during the World Trade Center Disaster didn't even have something as simple as a "Go Bag", but just showed up with an HT and MAYBE one extra battery...... They weren't put to use because they were under-prepared. I hope that many have learned from this and now have adequate "Go Bags.")

However, by my definition, a "Jump Kit" is something very much different. It is not a backpack or even a "kit", but rather a large cache of supplies and radio equipment you'd bring with you to a non-local location such as what you'd bring traveling a distance to support a disaster in another state as either a stand-alone station op or as a member of a communications team. This would require more food, water, equipment, power and antenna considerations and shelters for an event where there wouldn't be much of anything to rely on.

There seems to be very little found about actually organizing an EmComm Jump Team anywhere on the Internet other than stating a need for them in local plans. It kind of reminds me of everyone wanting one, but no one knowing how to go about it. I know that there are very well run jump teams out there, however not much posted about them other than what they've done i.e.: "event deployment". I am aware that many teams are "area-related", however the more info we are armed with, the better job we can do in creating our own jump teams and making sure they have all they need to properly fill EmComm needs.

With this void of published information, there is a lack of self-confidence in the minds and hearts of those EmComm groups looking to develop their own jump team(s) beyond asking individual members to create/gather their personal go-kits in some back pack or bin to be used on a grander scale than supplying basic communications at a local shelter where they would be relieved in 12 hours. The basic go-kit is a nominal inventory of items and won't properly cover things needed during an event where one has to travel distances and to be deployed in the nakedness of a major disaster. Have you ever heard of a Dxpedition where members simply carried to "XYZ Island" gear and personal items on a few backpacks? This would be courting disaster.

So, in review, we need to concentrate on two problems: Lack of universal EMCOMM training and the lack of Jump Teams that can be deployed where needed in any part of the country. Perhaps the answer is to create regional EMCOMM coordination teams (coordination, NOT action teams) whose responsibility it will be to enlist the aid of their area's many ARES, RACES, REACT, CERT and SATERN groups without dismantling them or having them lose autonomy. This team will also help them to train with a new program, drill together and develop a mutual aide program that is more than the current lip service now shown. They should also act as a clearing house for up-to-date information and form a structured call out system in case an emergency event needs greater communications support than any one group is able to handle.

Our choice is simple: Do we continue to stumble along, fractured and cliquish or do we move forward together in the spirit of amateur radio as a viable emergency communications support resource? Let's make the right choice. Let's not forget September 11th nor Katrina. Let's make the choice to shine in the face of adversity.

COMMUNICATIONS ACADEMY 2007

I was invited to give a lecture at “Communications Academy 2007", but I am unable to attend.
I was then invited to submit a paper to this convention. The paper I submitted is posted above.
I hope EmComm people find it useful.

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